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September 2010

TO: **TELECOMMUNICATIONS MANAGERS**

The California Statewide Interoperability Executive Committee (CalSIEC) and California Interoperability Communications Office (CICO) are pleased to provide you with the updated California On-Scene Emergency Coordination System (CALCORD) Plan. Important updates have been made to the plan. The plan now reflects the CalSIEC's role in providing oversight of the system and includes a streamlined application process and new application forms.

An important issue over the next two years is that of Narrowbanding. The Federal Communications Commission (FCC) has mandated that all non-Federal public safety licensees operating 25 kHz radio systems in the 150-174 MHz and 421-512 MHz bands (the VHF and UHF bands) migrate to more efficient 12.5 kHz (narrowband) channels by January 1, 2013. In other words, the FCC will no longer allow the use of wideband on VHF and UHF public safety frequencies, including the CALCORD channel, from December 31, 2012 on and will not automatically issue new licenses.

Cal EMA will release further information on the transition of interoperability channels from wideband operations to narrowband operations, including effective dates and policy changes, in the near future.

Your input is very important to us. Please email all feedback, comments, and questions on the updated CALCORD Plan to Interop@calema.ca.gov.

NOTE: The CalSIEC and CICO strongly encourage all entities licensed to use CALCORD to apply for a modification to their existing FCC license(s) as soon as possible. This is crucial to comply with the new narrowband licensing requirements and to ensure interoperability with agencies that have already transitioned to narrowband.

John Penido
CalSIEC Chair

Michael Crews
Statewide Interoperability Coordinator

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CALIFORNIA ON-SCENE EMERGENCY COORDINATION SYSTEM PLAN

(CALCORD)

Version 1: 10/5/2010

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Overview

The California On-Scene Emergency Coordination (CALCORD) System provides common radio frequencies to be used statewide by state and local Public Safety and Special Emergency agencies during periods of man-made or natural disasters or other emergencies where interagency coordination is required. CALCORD facilitates communications when the Incident Command System (ICS) is used.

All CALCORD users operate within the limitations of the CALCORD plan. The California Emergency Management Agency (Cal EMA) manages CALCORD and enforces strict adherence to its plan. Violations can result in loss of authorization to use CLEMARS channels.

System Management

CALCORD operates under appropriate FCC Rules and Regulations and is administered by the State of California through Cal EMA. The California Statewide Interoperability Executive Committee (CALSIEC) exercises general supervision and disciplinary control over CALCORD.

Eligibility

Participation in CALCORD is open to all California Local Government Agencies who are eligible to operate on radio frequencies authorized by the FCC for the Public Safety Radio Services. Private ambulances, operating under the authority of a city or county participating in CALCORD, may also program the CALCORD channel into their radios.

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Application Procedure

FCC licenses are acquired by and in the name of the State of California.

Charges are levied on all applicant organizations when seeking a new frequency or making a license change, system modification, or any other technical change which requires an official FCC license modification or transaction to take place.

For more details on the fee structure and process, please visit the Public Safety Communications Division (PSCD) website or contact the Frequency Coordination and Licensing Unit at **(916) 657-6153.**

http://www.cio.ca.gov/PSCD/Services/PubSafety/default.htm

Mobiles Only

1	**Draft a "letter of intent" (LOI) on your agency letterhead** The letter should contain information on the requested channels, proposed site(s) and area of operations. If the system is to serve more than a single political entity, provide additional details such as a list of all individuals responsible for the project.
2	**Fill out the license request forms at the end of each plan** As needed, contact the California Interoperability Coordinator's Office (CICO) or Cal EMA Telecommunications Duty Officer (TDO) for further assistance.
3	**Send the LOI and completed form(s) via postal mail or email to the CICO** California Emergency Management Agency Attn: California Interoperability Coordinator's Office 3650 Schriever Avenue Mather, CA 95655 Email: @calema.ca.gov
4	**Program Radios** Requestors may program channels into radios but may not transmit until final FCC authorization is received. Contact the PSCD FCC Unit at (916) 657-6153 for a status on FCC authorization.

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Operational Standards

Permissible Communications

CALCORD is for official use only. CALCORD usage is in strict accordance with the FCC Rules and Regulations and the policies laid out in this plan.

CALCORD is used for non repeated, point to point communications only. It is used in mobile and/or portable units at the scene of incidents requiring coordinated action by more than one agency and/or discipline.

Base stations are prohibited from operating on CALCORD.

Channel Identifiers

Only the Standard California Channel Identifiers are used for CALCORD. It is strictly prohibited to assign a local identifier to a mutual aid channel.

Channel Use Priorities

CALCORD is governed by a system of priorities that must be respected at all times: it is limited to emergency operations (**Priority 1 and 2**), with the exception of tests and drills (Priority 4).[1] When a higher priority or use is required, all lower priority use must cease in any area where interference could occur.

- **Priority 1**: Disaster and extreme emergency operations for mutual aid and interagency communications
- **Priority 2**: Emergency or urgent operations involving imminent safety of life or protection of property
- **Priority 4**: Drills, tests and exercises of a civil defense or disaster nature

The priority level is determined by the ICS.

Notification of Priority Traffic (Priority 1, 2, 4)

- Plain language must be used when "clearing" CALCORD for use in high priority situations.
- Agencies inform other area user agencies when they are involved in high priority usage of CALCORD by phone or email.
- Notify the Cal EMA Warning Center of high priority usage via phone (916-845-8911) or email (warning_center@oes.ca.gov).
- If two or more agencies in close proximity request a similar priority level clearance for simultaneous operations, contact the Cal EMA TDO (916-845-8911 or warning_center@oes.ca.gov) for guidance.

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[1] Please note that this 2010 update of the CALCORD plan has changed the original numbering of the Priorities from 1, 2, 3, 3A, 4 to Priorities 1 through 5.

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Message Precedence

Message Precedence is a classification system that establishes the priority of message content while a channel is in use – i.e., it helps determine which message has precedence over another on a channel. It is used for both verbal and written message traffic. The order of precedence of messages is:

1. **New Incident**: Messages pertaining to a new incident. Once the new incident is addressed, it no longer has precedence unless it has a higher priority.
2. **Emergency**: Messages involving the imminent safety of life or protection of property, including messages to request supplies, materials or instructions vital to relief of emergency operations.
3. **Priority**: Messages that are official and time-bound, but are not covered in the emergency category. Priority messages may include notice of deaths or injury in a disaster area.
4. **Welfare**: Messages involving the health and welfare of an individual in a disaster area.
5. **Routine**: Messages pertaining to routine operations.

Monitor First

Personnel must monitor the CALCORD channel prior to transmitting to minimize the possibility of interference with communications in-progress.

Identification

Mobile Units

1. Mobile units identify the unit or station with whom they wish to contact and identify themselves by using their agency-assigned unit designator. These are not shortened and include the entire set of letters and/or numbers.
   - **For example: "AMR 34, this is CalStar 12."**
2. During interagency operations, mobile units identify their agency in addition to their agency-assigned unit designator.
   - **For example: "Sacramento Engine 35, this is CalStar 12."**

Plain Language

All communications on CALCORD are in plain language. Radio codes, acronyms, and abbreviations are to be avoided as they may cause confusion between agencies and disciplines and jeopardize officer safety.

Voice Privacy

The use CALCORD for transmission of encoded, encrypted, digital, or scrambled messages is prohibited.

Interoperability Operation

In the event of a public safety Priority 1 or 2 emergency, and in keeping with appropriate FCC Rules, CALCORD may be *temporarily* cross-banded through automatic or manual

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equipment with another channel. A cross-band or use of a gateway switch must be discontinued when the operation requiring its use is finished. Refer to Cal EMA's Statewide Gateway Units Standard Operating Procedure for more information on gateway procedures.

Supervisory Responsibility

Each agency manager and supervisor bears the responsibility for the compliance of operations on CALCORD to the CALCORD Plan. Violations are reported to Cal EMA who works with each agency's executives to correct reported problems. See Appendix B for the complaint procedure.

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Technical Standards and Procedures

VHF High Band				
ID	Rx Freq	CTCSS	Tx Freq	CTCSS
CALCORD	156.0750 W	None	156.0750 W	None

Power Limitation

Transmit power may not exceed 110 watts for mobile (except aircraft) and portable use. When use for airborne operations, the maximum output is 10 watts.

Equipment

Two types of equipment may be used on the system:

- Mobile: Installed semi-permanently in a vehicle, boat, aircraft, or other device commonly used for transportation of a human being.
- Portable: A hand-carried unit, also known as a walkie-talkie or handie-talkie.

Base stations are prohibited.

Call Sign

Common statewide identification – "KB82490"

CTCSS

None authorized

Voice Privacy

All forms of voice privacy (speech scrambling, digital voice privacy [DVP], digital and analog encryption [DES/AES], inversion, etc.) are prohibited on CALCORD.

Signaling or Paging

Tone or digital signaling, paging and/or alerting is prohibited on CALCORD.

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Essential Interoperability Guidelines Checklist

✓ **OBEY PRIORITIES:** When a higher priority use is required, all lower priority traffic yields the frequency immediately.

✓ **USE PLAIN LANGUAGE AT ALL TIMES.**

✓ **IDENTIFY WITH FULL AGENCY UNIT DESIGNATOR AND FCC CALL-SIGNS (BASE STATIONS AND MOBILES).**

✓ **MONITOR THE CHANNEL PRIOR TO TRANSMITTING.**

✓ **USE APPROPRIATE CODED SQUELCH**: Do not use local tones on interoperability channels without the capability of monitoring the mutual aid tone (156.7/$293) and turning the tone protection off.

✓ **USE THE CHANNEL'S STANDARD ID**: Program the standard California channel ID into your radio's display.

✓ **DO NOT SCRAMBLE OR ENCRYPT MESSAGES.**

✓ **DO NOT PERMANENTLY OR SEMI-PERMANENTLY LINK MUTUAL AID CHANNELS TO EACH OTHER OR TO LOCAL AGENCY CHANNELS.**

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Respect the policies and procedures set forth in each interoperability system's plan to ensure the interoperability channels are available for use in emergency situations.

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Appendix A: Complaint Procedure

Report all operations on mutual aid channels that are detrimental to officer safety or to the management of an incident, which fail to follow the procedures outlined in this mutual aid plan, which cause interference to other users, or that violate FCC Regulations 90.20 and 90.405.

To report flagrant violations that endanger officer of peace safety, immediately contact the LDO via the California State Warning Center (CSWC) (Telephone: 916-845-8911).

To report interference issues from outside sources and other misuses of mutual aid channels:

1. Attempt to identify the offending station.

2. Contact the chief executive of that department.

3. If the problem persists, contact the Cal EMA LDO via the CSWC (916-845-8911 or warning_center@oes.ca.gov) and relay:

    - The date and time of the problem

    - The circumstances regarding the interference or misuse

    - Information detailing how the misuse interfered with operations or safety

    - Information (identification, call signs, etc.) that would help locate the offending agency.

4. Keep audio logging tapes, tape cassettes, or digital files recording the misuse to send to Cal EMA. [If requested, Cal EMA will return the tape after its investigation.] On receipt of a complaint, Cal EMA will conduct an investigation.

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Appendix B: Acronym List

AES: Advanced Encryption Standard

ANSI: American National Standards Institute

CALCORD: California On-Scene Emergency Coordination System

Cal EMA: California Emergency Management Agency

CalSIEC: California Statewide Interoperability Executive Committee

CICO: California Interoperability Coordinator's Office

CSWC: California State Warning Center

CTCSS: Continuous Tone-Coded Squelch System

DCS: Digital Coded Squelch

DES: Data Encryption Standard

DVP: Digital voice privacy

FCC: Federal Communications Commission

NAC: Network Access Code

NPSTC: National Public Safety Telecommunications Council

PSCD: Public Safety Communications Division

TDO: Telecommunications Duty Officer

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Placeholder for:

APPLICATION AND AGREEMENT